# PULP & PAPER 1969 Index

This index contains all features and editorials published during 1969, and also a list of authors. References are by month and page number; for example, Jan. 100. Abbreviations are as follows:

Jan-January Feb-February Mar-March Apr-April

May-May Jun-June Jul-July Aug—August
WRN—World Review Number (June 25) Sep-September Oct-October Nov-November Dec-December

## Feature articles

#### Air/water treatment

Canadian mills face up to the challenge of stiffer Federal anti-pollution laws—Dec 127 Effluent control at Kimberly-Clark's Coosa River

trituent control at Kimberly-Clark's Coosa River mill must deal with newsprint and kraft dis-charge—Mar 113 Environmental protection—how much will it cost your mill?—Apr 152

your mill?—Apr 152 Extended aeration treatment reduces high BOD of pulp mill effluent—Feb 110 How color and organic carbon are removed from bleach plant effluent—Feb 135

how international Paper controlled its kraft mill ador at Ticanderaga, N.Y.—May 142 If you want to recover at least 90% solids, take a look at Publishers—Jan 135

Industry urged toward own waste plan; economists leave paper execs up in air—Apr 57 In-plant recovery methods help British paper mills

In-plant recovery methods help British paper mills lick effluent problems—Oct 137
Kraft mill emission—pro and con—Apr 154
Mills must re-examine their thinking on air/water control measures: Baldwin—Jul 99
Secondary oxidation overcomes odor from kraft

recovery-Jun 125

recovery—Jun 125
Spotlight on savealls, fiber recovery and water pol-lution problems, Part I—Oct 68
Spotlight on savealls, fiber recovery and water pol-lution problems, Part II—Nov 113
Spotlight on savealls, fiber recovery and water pol-lution problems, Part III—Dec 96

#### Chemicals

High bulking pigments bring lightweights a step closer—Jul 109 How to use chemical test to predict yield in pulp-ing trial—Apr 162

New breed of super clays leads to higher quality paper—May 117

paper—May 117
Polymer chemistry advances state of the art for paper industry—Aug 123
Synthetic polymer cuts boiler cleaning at Allied Paper—Jun 133

There's gold in those gases—turpentine, ready for

collecting—Oct 78
Why not investigate continuous preparation of wet end additives?—Nov 135

Why not investigate the potential advantages in using a sulfide pulping solution?—Dec 147

#### Coating/sizing

French firm is trendsetter in lightweight coated papers—May 71 Unusual coater takes over Feldmuhle's production

of quality art grades—Oct 65 What's cooking in coating technology around the

world?—May 67
Why not centralize and automate your coating preparation areas?—Nov 98

#### **Economics/statistics**

Canada: better times ahead-WRN 87

Delusions of inflation—Mar 91 Help sell the paper industry to the financial com-munity—Jan 73

Paper and board production by countries—WRN 10 Per capita paper and board consumption by coun-tries—WRN 9

Pulp market trends: supply sources may change after 1980—WRN 37

Pulp production by countries—WRN 11 Reports on industry progress in 143 countries— Reports on ind WRN 79-192

Timberlands play role in optimism towards paper industry stocks—Apr 102
U.S.A. paper industry sets records for '68, '69—WRN 79

West Germany, special report on industry struc-ture, history, expansion programs—WRN 14 World trends: new records in 1968 for many na-tions—WRN 7

#### Engineering

A first: automatic lube system. Result: Not one

lost bearing—Apr 77
At Haerner Waldorf, preventive maintenance means 50% less downtime, \$50,000 first year savings—

Feb 55 Cast nylon gears beat stress and strain of winder operation—Oct 118
Combat corrosion with flame spraying, paint, and

other selected coatings—Jun 134

Consider wood stave tanks: what is the case for and against?—May 91

Diagnose the health of your machine or process with vibration measurement—Jan 108

Faced with performing a balance? Here is a digi-tal computer program—Feb 68 How Hammermill Paper uses reinforced plastics—

How to achieve longer life at less cost—Sep 116
How to jackey a granite roll out of the press
section—Oct 87

section—Oct 87

How to predict maintenance requirements on a turbine-generator—Mar 100

How your mill should develop, present and control the maintenance budget—Oct 114

If humidity in your mill is too low, try steam separator type humidifiers—Feb 87

Is your mill faced with power outages? Leading mills tell solutions to problems?—Oct 106

Low voltage seen as the major culprit—Oct 108

Needlad felts are comber leave on life with new

Low voltage seen as the major culprit—Oct 108
Needled felts get another lesse on life with new
shower method—Nov 107
St. Helens to Vancouver: Unique pulp shipping
system solves supply problem—Jul 64
Should your new mill generate electric power?—
June 78

Something old, something new for electrical en-gineers—Jul 71

Three-roll press design yields positive results from newsprint machine trials—Dec 96 Vacuum pump runs well after 21 years—Jun 108

Want to solve your drive problems money?—here's how to do it—Jun 91

#### Expansion/modernization

Billerud NSSC fluting mill boosts several innova-

tians—Feb 64
Bowater thinks big with biggest paper machine in the world—Jun 64

Canadian International Paper at Gatineau brings in country's biggest paper machine—Sep 63

Consolidated revamps enamel paper machine, adds new coater—May 108 Container Corp. of America's Wabash mill boosts and output with Ultra Former wet end-

quality Aug 66 Crestbrook market pulp mill spearheads technologi-cal advances—Mar 80

Finnish mill uses ammonia-base for high quality corrugating medium—Dec 116

Gilman Paper embarks on new expansion program-

Kimberly-Clark converting plant highly automated Kimberly-Clark's Crescent Formers top 5,000 fpm

on tissue—Feb 49
Kimberly-Clark's "Yogi Express" stocks fine paper supermarket—Sep 77

MacMillan Bloedel United \$90 million forest prod-

ucts complex blends Canadian, Southern U.S. -May 59 ideas-PGP's Expansion/Modernization Survey-Dec 72

St. Mary's Kraft operates versatile new on-machine coater—Mar 62

coater—Mar 62
Rhinelander's North Star is biggest, fastest glas-sine/greaseproof machine—Dec 65
sine/greaseproof machine—Dec 65

Sorg's No. 7 machine boosts capacity of firm by more than 55%-Jun 98

## Finishing/converting

Automated roll handling system features unusual overhead wood slat conveyor—Dec 137 Copy papers—what is the market; where is it go-

ing?--Mar 119 Dust at the printing plant—what can the paper-maker do about it?—Jul 119

Four men handle 500 tpd of newsprint rolls-Jan 145

How board converters develop new packages to meet market challenge—May 147

How to use corrugating adhesives—Nov 145
Multi-ply: New sheeting methods explored by
Japanese, U.S. experts—Apr 54
Pallet conveyor provides continuous centralized
handling of corton flats—Apr 158

Roll tension—is it really there?—Aug 139 Specialized paper combinations enlarge markets

for pouch packages—Apr 157
Unique electronic sheeting-sorting proves success in Champion mill—Sep 155

Weigh-before-wrapping roll-handling system boosts capacity—Oct 127

Why corrugated boxes fail!-Jun 113

#### Forestry/wood handling

Australians look for profit in plantation grown pulpwood—Apr 122 Better communications needed to fully mechanize

the woods-Apr 116 Canadians develop new processor for short pulpwood-Oct 142

Chip interchange serves Crown Zellerbach mills-Feb 122 Continuing education is prime need of all foresters

-Apr 132

Continuing raw material problems face us unless we all work more closely—Apr 99

Domtar developed northern woodlands via mechan-ization and stable labor—Jul 94 Government expanding in woods workers field-Apr

Horvesting of the Third Forest: design the forest for the machines—Apr 120
Hoerner Waldorf mill overcomes problems in out-

side chip storage—Sep 141 How does your mill handle bark?—Mar 123

How forest genetics boosts volume and quality of wood—Jun 117

wood—Jun 117
How "The Third Forest" in the South will be managed—Apr 111
How to achieve The Third Forest: America must

How to achieve The Third Forest: America must cape with challenges—Apr 97
Is this tomorrow's logging system—Jan 152
Logging residuals—they make quality chips for St. Regis kraft mill—Oct 141
MacAvillan Bloedel-Alabama writes a new kind of wood utilization story—May 131
Maximum utilization is goal of Gilman's forestry

Maximum utilization is good of clinical states of program—Mar 64
More intensive forest management ahead in Northeast and Appalachians—Apr 105
Positive planning for high yield forestry needed in

Positive planning for high yeld forestly needed in Loke States—Apr 108

Progress in genetics, Part 2—Jul 113

Pulpwood's future is tremendous but problems need more cooperative effort—Dec 141

The Third Forest: How to meet expanded timber

demands for 2000—Apr 93
Trees for future; what should be done

Trees for future; what should be done—Apr 112
Trend to long logs—how St. Mary's Kraft handles
them—Mar 65
Vo-Ag, Vo-Tech: how successful are the programs;
what about their future?—Apr 124
Where are we going to get the wood? A view from
the Pacific Northwest—Nov 141
Whither softwood stumpage values?—Aug 129
Woods training—both begins to walk—Apr 126

Woods training—baby begins to walk—Apr 126 You **cen** take it with you—mobile chip mill—Feb

### Management/supervision

Better management: How engineers can plan their time to best advantage—Jul 121 Beware of hydrogen sulfide—how protective meas-ures save employees—May 139

Computers: Where have they led us; where do we go from here?—Sep 91
Crown Zellerbach rounds out 36th year of industrial education—Jun 128

Decide what you want before you set up crew

training—Feb 106
Don't just direct—motivate—Nov 158

Dunning's four ways to strengthen industry, oid society, win young public—Jun 72 Dynamic Italian paper industry moves ahead on many fronts—Dec 6

Facing a startup? Check Blandin's success with continuous crew training—Jan 139

continuous crew training—Jan 139
How a mill sofety program cuts injuries—Mar 146
How International Paper views the disposables
field as important new activity—Aug 105
Human error causes most injuries—Jun 130
Hus—not enough is known about it—May 140 Management's most profitable investment instru-ment—manpower—Dec 151

Manpower; how to get engineers—Apr 52 Off-machine sheeter line attracts reliable workers—

Apr 161 Outlook: Challenging times ahead: Hansberger-Jon 66

Outlook: Four more viewpoints . . , and they vary

Outlook: International Paper's research VP tags

future goals-Jon 68 Outlook: Sheets looks at technological advances— Jan 70

Pulp and paper industry a high flyer for over 50 years—Aug 57
Small mill wants to stay small—it fills a niche the

giants con't—Oct 61

The paper-fabric tiger goes to market—Jun 75

What fire in a roll paper warehouse looks like—Sep 161

Sep 161
What leads students into paper?—Aug 135
Whitaker, former industry chief, says firms prepare
for "booming 70s"—Aug 94
You too can enjoy a strike! Follow these simple
rules—Oct 130

#### Meetings

CPPA annual meeting-behind the scene-CPPA annual meeting, practical approach in tech-nical sessions—Mar 70

CPPA annual meeting-rapturous optimism Disposables Assn. first annual meeting-poses prob-

Iems—Aug 102 ISA-CPPA joint international symposium on con-

trols engineering—Jun 57
Mexico's ATCP annual conference—raw material,

prices, markets pose problems-Aug 72 PIMA marks a half-century devoted to better management and manufacturing—Sep 71

TAPPI annual meeting—Apr 49
TAPPI Coating conference—look at lightweight grades—Jul 57
TAPPI Engineering: innovate economically to keep

ahead of the torrent of technological change-

Western Michigan U winter conference-specialty papers and boards-Feb 60

### Paper/board manufacture

Adjustable felt—operation is different, but per-formance effective—Jan 104 "Cartridge" press concept cuts downtime for felt change—Sep 98

Consider the future of the cylinder machine can it survive the next 10 years—Jan 9 Curved rolls aid felt performance—Nov 124 Disposable: Wet or dry lay best?—Jan 83

Drainage foils—How good are they, how can their effects be measured?—Aug 78

First high speed liner machine with all foils sets new highs—May 95 Fourdriniers: twin wires take over—Apr 50

High-speed comera probes potterns of water re-moval and action of stock—Feb 78 How Albemarle operates its Venta-Nip—Feb 92 How to blow new life into dryer section—Oct 94

How to overcome fine paper problems in forming, pressing and drying—Oct 73
Monel-asbestos-polyester combo cuts dryer felt cost/ton 60% for Albermarle—Nov 117
Needled felts—how to use them successfully in

board mills—May 77 eflon sleeves solve release problems on paper machine rolls—May 103
Three-roll press design yields positive results from newsprint machine trials—Dec 101

Water removal technology advances on all fronts
—forming, pressing, drying—Mar 94

## Power/recovery

A gun guards Boise lime kiln—Jan 114 Boiler makeup—treat it sixty Boiler makeup—treat it right!—Oct 147 Conventional furnace burns ammonia liquar—Feb

138
How does recovery odor control affect a kraft mile energy balance?—Nov 151
How to get top efficiency with a modern boiler—
—Sep 108
Novel recovery process solves water quality problem for Royonier sulfite mill—Sep 133
Rapid, simple carbonate test helps Longview Fibre control conditions of reburned lime—Mar 137

control conditions of reburned lime—Mar 137 Swedish venture aids in NSSC chemical recovery-

Want a more direct approach to spent liquor pro-cessing?—Aug 115

#### Process control

Computer + control philosophy + people = excel-lent payout for Container Corp.—Jan 76

Computerized system is fast, accurate in color matching—Oct 104

Computers lead parade of progress in automating pulp and paper processes—Nov 59

Continuous bulk profiler proves valuable tool for Continuous bulk profiler

Scott—Nov 73
Control: How computers are paying off—Apr 53
Electronic control improves blending accuracy—

Nov 7: How a single computer was integrated on-line for pulp and paper mill control—Apr 71 How to step up accuracy in moisture measure-ment—Jan 122

How TV boosts efficiency and safety at South-

Index paper—Jun 106
Improved control techniques lead to faster systems payoff, lower costs—Nov 65
Messuring device cuts clarifier down time and spillage—Nov 74

New logger records pulping, bleaching data simul-taneously on one sheet—Mar 109 On-line color control system holds shade within specs—Nov 72

specs—Nov 72
Quality and process control getting a boost from
new instruments—Nov 69
Sulfur compounds from recovery furnace monitored
continuously—Nov 70
Two chromoscopes add up to brighter groundwood

## Pulping/bleaching

Directory of world producers of market pulp-WRN

Flash drying—are your nodules showing?—Oct 101 German mill goes sulfite route with new continuous digester—Jul 82 Global view of pulping developments—Jul 80

Going into refiner groundwood? Here's how one Swedish mill does it—Jun 86

Swedish mill does it—Jun 86
Holopulping—Get more pulp wth less chemicals
at expense of electricity—Jul 68
Hypochlorite—what you should know about this
bleach plant workhorse—Feb 70
India's first market pulp mill is based on bamboo

—Sep 121 Odor! Pollution! Yield! Pulpmen on target with new

approaches—Dec 57
Oxygen caustic bleaching—out of the lab, into the the mill-Sep 148

condinavion scene in pulping: Technological progress brightens future—Jul 78
Secondary fibers—many facets of processing and usage explored—Dec 109

usage explored—Dec 109 Startling losses—up to 25%—possible in chipping USFS—May 136 Sulfite men pay attenton to sulfur dioxide, sulfur-ous acid—Apr 55 Swedish mill uses themomechanical process to im-

prove pulp quality—Sep 104 What you should know about bleach plant caustic systems—Jan 86

World's only commercial polysulfide mill reveals advantages and problems

## R&D/quality control

In Europe: paper industry executive discloses great nonwoven progress—Aug 108 Light transmission unit now used for on-line opa-city measurement—May 100

New era begins at Paper Institute; Graduate Cen-ter, "systems approach"—Jul 61 New Inverform concepts get tryout on experimental machine—Jan 92

Using spectral analysis—Apr 56

# Stock preparation/deinking

All about pressure screens: How versatile are they, how can they best be used?-Aug 88 Here's a broke system to cut costs, delays-Jul 86

# Editorials

A baffling and a tragic problem of the South-

Breakfast banter: Wind-kissers' hooey—Oct 59 Breakfast banter—Conservationist baloney—Nov

Christmas brings prosperity—also problems—Dec 55

Hickel and Udall-contrasts emphasize industry problem-Mar 57

"Hypocrisy is homage vice pays to virtue"—Roche-foucald—Jul 55 It's Nixon now, but still a Washington merry-go-round—Apr 47

Problems in Latin America—Aug 55
Pulp, paper and space—"wave of the future"—
Sep 61
Social responsibility—your greatest '69 challenge

-Jan 63

Student protesters: It's their future, not ours-Jun Views on Pentagon issues and lumber price crisis
—May 57

# Inside industry

Dateline Appleton: Congratulations—You're 81!— Jul 150

Dateline Appleton, Wis.: Who puts money where his mouth is?—Sep 210 Dateline Atlanta: Think this over—before 1970 labor bargaining—190 Dateline Bale Comeau, Que.: "Bertie" paddled his own canoe—Nov 202 Dateline Beech Island—Apr 184 Dateline Mexica D.F.: "En Mexico, toda es posible!" Jan 160 Dateline Pine Hill: Canada rediscovers the South—Feb146 Dateline Senneville, Quebec: The story of a TAPPI gold medalist—Mar 154 Dateline Syracuse and Orono, Me.: How to defeat student radicals—Aug 172 Dateline Thoroid and Baie Comeau: From Col. Mc-Carmick to the Bel-Baie—Oct 204 Dateline Washington: Dateline Thoroid on Baie Comeau: From Col. Mc-Carmick to the Bel-Baie—Oct 204 Dateline Washington: Two ways to bow out of power—Jun 166

Authors

Ahlquist, George J.—Apr 162 Alsholm, Olle—Apr 71 Anderson, Ralph G.—Apr 124

Baidemann, Paul E.—Sep 116
Barnes, Wade E.—May 91
Benzing, James A.—Sep 155
Blackerby, Louis H.—Jan 66, 135; Feb 55, June 57, 117, 128; Jul 64, 113; Oct 41
Blackerby, Louis H., and Williams, Ward C.—Sep 71
Brenner, R. O.—Jun 113
Brooks, Sheldon—Oct 68, Nov 113, Dec 96
Broughton, Robert W.—Nov 107
Bucheit, E. H.—Oct 106
Burditt, A. W.—Jun 106
Butterworth, G. A. M.—Jan 83

Caldwell, Lynton K.—Apr 97
Carson, Bert—Oct 114
Carter, Nick—Mar 109
Chapman, J., and McCormick, M.—Jan 92
Church, Fred—Jan 122, Sep 91
Clarke, James and Davis, Jr., M. W.—Feb 135
Clement, J. L., and Sage, W. L.—Feb 138
Coburn, Torn—Nov 158
Conzett, John C.—Jan 108
Cottle Jr., B. J., Newbauer, H., and Buck, J., and Billings, R. M.—Mar 113
Cully, S. Eldon—Apr 131
Cutshall, Keith A.—Jul 86

E

Dohm, Hans Petter—Jul 78 Dalheim, Stuart A.—Oct 104 Day, E. A.—Sep 161 Doane Jr., Foster P.—Mar 94 Drummond, Robert M.—May 142

Egan, Roger—Jan 73

Fahlgren, Sven—Aug 88 Farin, William G.—Aug 115 Faust, J. G.—Apr 161 Foil, R. Rodney—Apr 132

Gantzharn, Eugene R.—Jan 68, Feb 60 Garrson, Roy—Jun 133 Getman, Darryl L.—Aug 78 Gill, J. P.—Nov 72 Haas, Leonard E.—Feb 64, May 71, Jun 86
Hagenstein, W. D.—Nov 141
Hambleton, Dana A.—Nov 71
Hansen, V. E.—Feb 78
Hanson, A. G., and Kerruish, C. M.—Apr 122
Harlan, D. L., and Danielson, L. P.—Jan 86
Haztewood, Eric—Nov 69
Heckroth, Charles W.—Jan 76, 152; Mar 66, June 64, Jul 99, Aug 72, Sep 63, Nov 80, Dec 127, 141
Heckroth, Charles W. and Van Derveer, Paul D.—Apr 49
Hensel, J. S.—Oct 142
Hilling, Bre and Johanne, Kiell—May 73

Heckroth, Charles W. and Yan Derver, 1988.

Apr 49
Hensel, J. S.—Oct 142
Hilmo, Per, and Johnsen, Kjell—May 73
Hodges, Ralph D.—Apr 99
Hough, G. W., and Mason, F. I.—Oct 101
Hungerford, Stanley W., and Ramstad, Theodore
R.—Nov 73
Hussain, S. M., Farrell, W. R., and Gunning, J.
R.—Aug 139

Imbermon, A. A.—Oct 130

Jones, Roger—Nov 65 Julson, J. O.—Apr 152

Kalish, John E.—Jul 82, Oct 65 Kessler, Norbert—Sep 98

Lang, J. Omer—Apr 126 Lavoie, Georges—Jul 94 Lee, Lester J., Smith, Bruce W., and Mounce, George R.—May 100 Lesure, John—Jan 104 Liu, L. Y.—Oct 78 Loftesness, E. J.—Nov 135 Lund, Tony—Jan 145

McSweeney, Edward S.—Jun 75 Magnol, Richard M.—Nov 98 Marsh, Ray—Jun 78 Martin, Fred—Jun 125 Mercado, Roy—Nov 145 Morgan, Oliver P.—Feb 110 Muller-Clemm, Hellmuth—WRN 14

Nelson Jr., A. W.—Apr 93 Nicholson, George B.—Jon 90 Nykopp, E. A.—Dec 101

Panetto, Robert—Mar 123
Petersen, Richard E., and Krauth, Joseph A.—Sep 133
Pitts, L.—Aug 123
Pollitzer, Stephanie—Aug 57

Raines, C. L.—Mar 100
Ramsey, B. B.—Jul 121
Rerolle, P., Myburgh, H. H., and Robert, A.—Sep 148
Roberson, James E.—Nov 151
Roberts, Bab—May 103
Roberts, Wifred T.—Oct 137
Rock, Mont—Mar 137
Ross, Lawrence—Apr 102
Ruskin, V. W.—Feb 68

Sahlman, B. C.—Apr 120 Show, Charles L.—Apr 77, 154; Jun 134, WRN 87 Smith, G. F., and Danielson, L. P.—Feb 70 Smith, K. C.—Oct 147 Smith, Dr. James E.—Apr 157

S

Snyder, Joe W.—Nov 74 Spanjer, David L.—Apr 116 Spence Ir., N. D.—Feb 92 Stubbs, William H.—Mar 146

T

Thoen, G. N.—Nov 70
Timmermon, D. N.—Jun 91
Troczewitz, O. G.—Apr 111
Trestrail, Richard W.—Aug 129
Trimble Jr., George R.—Apr 105

U

Ulrich, Ortho E .- Feb 87

٧

Van Derveer, Paul D.—Jan 70, Mar 70, May 117, Jul 71, 57, WRN 79, Aug 66, Sep 77, Dec 57 Vaughan, L. H.—Sep 108 Ventosa, John—Oct 108

W

Wacquez, Pierre, Strube, Pierre, and Wieselman, Leonard—Oct 94
Wohlstrom, Jack—May 139
Walz, Albert—Feb 97
Weeks, Larry and Springer, Richard E.—Sep 141
Westell Jr., Casey E.—Apr 108
Whitney, Roy P., Thompson, N. S., Nicholis, Dr. Gordon A., and Han, S. T.—Jul 68
Williams, Ward C.—May 140
Williams, Ward C.—May 59, 62; WRN 7, Aug 102, Sep 104, Oct 61, Dec 68
Wilson, Albert W.—Mar 76, Apr 57, Jun 72, Jul 61, WRN 37, Aug 94

Z

Zavatone, J. F.—May 147 Zephir, Andrew F.—Mar 119 Zobel, B. J.—Apr 112

# NEW 1970 Pulp and Paper Mill Map

Produced exclusively for PULP & PAPER by American Map Company, based on new data from the 1970 edition of Post's PULP & PAPER DIRECTORY. Features:

- Location of every U.S. and Canadian pulp, paper and board mill
- Mills under construction
- Large-scale insets for areas of heavy mill concentration
- Geographical index by state, province and city
- Major rivers; softwood and hardwood areas—in color

Size: 42"x29"-Price: \$8 postpaid

Shipped rolled in container, ready for hanging. Special framing and mounting services also available—write for quotations.

# **PULP & PAPER**

Circulation Dept. 500 Howard St., San Francisco 94105